Art. IV.—*On a Form of Tangent Galvanometer suitable for Measuring Powerful Currents.*

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An instrument for measuring the strength of such powerful currents as those employed in electric lighting, which shall combine portability, simplicity of construction, and accuracy, seems still to be a desideratum. The galvanometer, a rough model of which I exhibit this evening, combines these advantages better than any instrument of which I have seen a description. It consists of a band of copper, bent so as to form two concentric circles, which will be traversed by the current in opposite directions, as shown in the accompanying sketch. At the common centre of the circles is supported a magnetic needle, to which is attached an index moving over a graduated circle, or a mirror to reflect a beam of light on to a scale in the ordinary manner. The leading wires are twisted together to prevent their having any sensible influence on the needle.

(See Diagram.)